

ZAK Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant ZAK.

Catalog # AT4567a

Product Information

Application	WB, IF, E
Primary Accession	Q9NYL2
Other Accession	BC001401
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	3D11
Calculated MW	91155

Additional Information

Gene ID	51776
Other Names	Mitogen-activated protein kinase kinase kinase MLT, Human cervical cancer suppressor gene 4 protein, HCCS-4, Leucine zipper- and sterile alpha motif-containing kinase, MLK-like mitogen-activated protein triple kinase, Mixed lineage kinase-related kinase, MLK-related kinase, MRK, Sterile alpha motif- and leucine zipper-containing kinase AZK, ZAK, MLTK
Target/Specificity	ZAK (AAH01401.1, 1 a.a. ~ 455 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ZAK Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

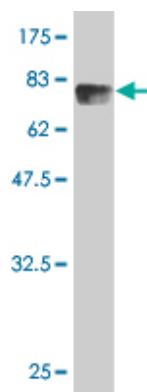
Background

This gene is a member of the MAPKKK family of signal transduction molecules and encodes a protein with an N-terminal kinase catalytic domain, followed by a leucine zipper motif and a sterile-alpha motif (SAM). This magnesium-binding protein forms homodimers and is located in the cytoplasm. The protein mediates gamma radiation signaling leading to cell cycle arrest and activity of this protein plays a role in cell cycle checkpoint regulation in cells. The protein also has pro-apoptotic activity. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

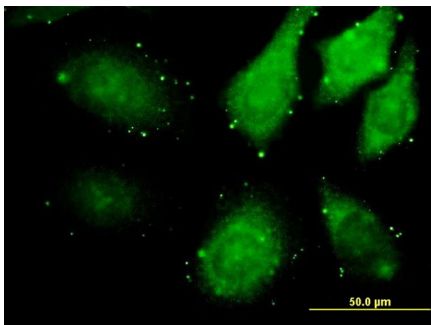
References

Mapping of phosphorylation sites in human MSK1 activated by a novel interaction with MRK-beta. Wang W, et al. Electrophoresis, 2010 Apr. PMID 20408143. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. ZAK inhibits human lung cancer cell growth via ERK and JNK activation in an AP-1-dependent manner. Yang JJ, et al. Cancer Sci, 2010 Jun. PMID 20331627. ZAK: a MAP3Kinase that transduces Shiga toxin- and ricin-induced proinflammatory cytokine expression. Jandhyala DM, et al. Cell Microbiol, 2008 Jul. PMID 18331592. Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

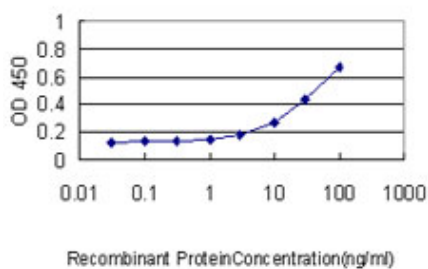
Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (75.79 KDa) .



Immunofluorescence of monoclonal antibody to ZAK on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged ZAK is approximately 0.3ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.